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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/781,757

02/20/2004

Tetsuhiro Hirao

1341.1186

3736

21171

7590

09/29/2006

STAAS & HALSEY LLP

SUITE 700

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WASHINGTON, DC 20005

EXAMINER

VY, HUNG T

ART UNIT

PAPER NUMBER

2163

DATE MAILED: 09/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/781,757

Applicant(s)

HIRAO, TETSUHIRO

Examiner

Hung T. Vy

Art Unit

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/20/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Summary of claims

1. Claims 1-13 are pending.

Claims 1-13 are rejected.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 02/20/2004. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "virtual storage area built by virtually integrating the real storage areas" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

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of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 2, 4, 5, 7, and 12 -13 are rejected under 35 U. S. C. § 102 (e) as being anticipated by Mogi et al. (U.S. pub. No. 2003/0229645).

Regarding to the claims 1,12-13, Mogi et al. discloses a virtualized-information management apparatus and method for managing corresponding information between real storage areas of a plurality of storages connected to a network and a virtual storage area built by virtually integrating the real storage areas (see column paragraph 0059), comprising: a transmission/reception unit that transmits/receives, between the virtualized-information management apparatus (60) and another virtualized-information management apparatus (60) connected to another network (46 & 40) (see fig. 7-8), information on updating the corresponding information (see paragraph 0163); and an

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updating unit that updates the corresponding information based on the information received (see paragraph 0173).

Regarding to the claims 2 and 7, Mogi et al. discloses a searching unit that, when receiving a request for writing data into or reading data from the virtual storage area, searches for a virtualized-information management apparatus connected to a network where the virtual storage area (50) is built (see paragraph 0098); and a writing/reading unit that, when the virtualized-information management apparatus searched is the virtualized-information management apparatus itself, writes data into or reads data (data migration, copy) from the real storage areas (54) corresponding to the virtual storage area (50) based on the corresponding information updated (see paragraph 0091,0094,0104,0150).

Regarding claim 4, Mogi et al. discloses when the writing/reading unit receives the request for reading data from the another virtualized-information management apparatus (72), it reads the data from the real storage areas (54) corresponding to the virtual storage area (50) based on the corresponding information updated, and transmits the data read to the another virtualized-information management apparatus (see paragraph 0165-0169 and fig. 7,8 and 10).

Regarding claim 5, Mogi et al. discloses when the virtualized-information management apparatus (from mapping management server 72 to 60→60→50)(see fig. 1) searched is the another virtualized-information management apparatus, the writing/reading unit transfer the request for writing data or reading data to the another virtualized-information management apparatus (see fig. 1).

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Regarding claim 8, Mogi et al. discloses a building unit that selects the real storage areas based on a predetermined condition, and builds (create) a new virtual storage area by virtually integrating the real storage areas selected (see paragraph 0014).

6. Claims 1, 2, 4, 5, 7, and 12 -13 are rejected under 35 U. S. C. § 102 (b) as being anticipated by Miura Masahiro (Japan Pub. No. 2000-267937).

Regarding to the claims 1, 2, 4, 5, 7, and 12 -13, Miura Masahiro discloses a virtualized-information management apparatus and method for managing corresponding information between real storage areas of a plurality of storages connected to a network and a virtual storage area built by virtually integrating the real storage areas (see fig. 4), comprising: a transmission/reception unit that transmits/receives, between the virtualized-information management apparatus (424-1) and another virtualized-information management apparatus (424-2) connected to another network (41) (see fig. 4), information on updating the corresponding information (see paragraph 0035-0039); and an updating unit (421-1, 421-2) that updates the corresponding information based on the information received (see paragraph fig. 4).

Claim Rejections - 35 U.S.C. § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 3, 6, 9 and 10-11 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Mogi et al. (U.S. pub. No. 2003/0229645) in view of Ganesan et al. (U.S. Pub. 2003/0069973).

Regarding to claims 3, 9 and 10-11, Mogi et al. discloses all limitations of invention recited in claims 1, 2 and 8 except for a capsulating unit and a decapsulating unit that decapsulates capsulated information using an Internet protocol packet. However, Ganesan et al. discloses a capsulating unit and a decapsulating unit that decapsulates capsulated information using an Internet protocol packet (see paragraph 0160,0161). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Mogi et al's system by adding a copulating unit that copulates the information on updating the corresponding information using an internet protocol packet and a decapusulating unit in order to control transfer the packet and reduce the packet size when transfer data in network for state purpose has been well known in the art as evidenced by the teaching of Ganesan et al. (see paragraph 0159).

Regarding to claim 6, Mogi et al. discloses all limitations of invention recited in claim 5 except for a data cache. However, Ganesan et al. discloses a data cache (see paragraph 0142). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Mogi et al's system by having a cache data in order to provide the memory for receiving data transmitted from the another virtualized-information management for state purpose has been well known in the art as evidenced by the teaching of Ganesan et al. (see paragraph 0142).

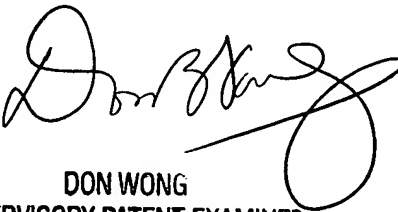
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung T. Vy whose telephone number is (571) 2721954. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K. Wong can be reached on (571)2721934. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hung T. Vy
Art Unit 2163

October 15,2006


DON WONG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

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